



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0030; Project Identifier MCAI-2020-01395-T; Amendment 39-21555; AD 2021-10-22]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc., Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Bombardier, Inc., Model BD-700-1A10 airplanes. This AD was prompted by a report indicating that during installation, a fuel pipe bracket assembly on the intermediate rib in the center fuel tank was mislocated, resulting in an offset between the fitting assembly and the refuel/defuel tube assembly. This AD requires modification of the fuel pipe bracket assembly, including all related investigative actions and corrective actions, if necessary; and performing an operational test of the refuel and defuel system. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada;

telephone 514-855-5000; fax 514-855-7401; email thd.crj@aero.bombardier.com;
Internet <https://www.bombardier.com>. You may view this service information at the
FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St.,
Des Moines, WA. For information on the availability of this material at the FAA, call
206-231-3195. It is also available on the Internet at <https://www.regulations.gov> by
searching for and locating Docket No. FAA-2021-0030.

Examining the AD Docket

You may examine the AD docket on the Internet at <https://www.regulations.gov>
by searching for and locating Docket No. FAA-2021-0030; or in person at Docket
Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
The AD docket contains this final rule, any comments received, and other information.
The address for Docket Operations is U.S. Department of Transportation, Docket
Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey
Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Siddeeq Bacchus, Aerospace
Engineer, Mechanical Systems and Administrative Services Section, FAA, New York
ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone
516-228-7362; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

Transport Canada Civil Aviation (TCCA), which is the aviation authority for
Canada, has issued TCCA AD CF-2020-37, dated October 9, 2020 (also referred to as the
Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe
condition for certain Bombardier, Inc., Model BD-700-1A10 airplanes. You may
examine the MCAI in the AD docket on the Internet at <https://www.regulations.gov> by
searching for and locating Docket No. FAA-2021-0030.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bombardier, Inc., Model BD-700-1A10 airplanes. The NPRM published in the *Federal Register* on February 24, 2021 (86 FR 11191). The NPRM was prompted by a report indicating that during installation, a fuel pipe bracket assembly on the intermediate rib in the center fuel tank was mislocated, resulting in an offset between the fitting assembly and the refuel/defuel tube assembly. The NPRM proposed to require modification of the fuel pipe bracket assembly, including all related investigative actions and corrective actions, if necessary; and performing an operational test of the refuel and defuel system. The FAA is issuing this AD to address the offset, which could cause a preload on the fuel pipes and reduce their ability to absorb shock or vibration-induced loads, making the tube and clamp more prone to stress corrosion cracking. This could lead to failure of the coupling and the bracket and p-clamp assembly, resulting in fuel leakage and loss of electrical bonding between fuel pipes, and lightning-induced sparking that could induce fuel ignition. See the MCAI for additional background information.

Comments

The FAA gave the public the opportunity to participate in developing this final rule. The FAA received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

The FAA reviewed the relevant data and determined that air safety and the public interest require adopting this final rule as proposed, except for minor editorial changes.

The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and

- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information under 1 CFR Part 51

Bombardier has issued Service Bulletin 700-28-6006, dated June 1, 2020. This service information describes procedures for a modification of the fuel pipe bracket assembly, including investigative actions (a detailed visual inspection of the fuel pipe assembly for any damaged paint, permanent deformation, corrosion, cracking, gouges, dents, or deep scratches); installation of certain new parts; replacement of the fuel pipe and fuel pipe bracket assembly, if necessary; and an operational test of the refuel and defuel system. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 51 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
10 work-hours X \$85 per hour = \$850	\$904	\$1,754	\$89,454

The FAA estimates the following costs to do any necessary on-condition action that would be required based on the results of any required actions. The FAA has no way of determining the number of aircraft that might need this on-condition action:

Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
3 work-hours X \$85 per hour = \$255	\$1,937	\$2,192

According to the manufacturer, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators. The FAA does not control warranty coverage for affected operators. As a result, the FAA has included all known costs in the cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2021-10-22 Bombardier, Inc.: Amendment 39-21555; Docket No. FAA-2021-0030; Project Identifier MCAI-2020-01395-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc., Model BD-700-1A10 airplanes, certificated in any category, serial numbers 9657 through 9844 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 28, Fuel.

(e) Reason

This AD was prompted by a report indicating that during installation, a fuel pipe bracket assembly on the intermediate rib in the center fuel tank was mislocated, resulting in an offset between the fitting assembly and the refuel/defuel tube assembly. The FAA is

issuing this AD to address the offset, which could cause a preload on the fuel pipes and reduce their ability to absorb shock or vibration-induced loads, making the tube and clamp more prone to stress corrosion cracking. This could lead to failure of the coupling and the bracket and p-clamp assembly, resulting in fuel leakage and loss of electrical bonding between fuel pipes, and lightning-induced sparking that could induce fuel ignition.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspection and Corrective Action

Within 30 months after the effective date of this AD: Perform a modification of the fuel pipe bracket assembly and refuel tube assembly; do all related investigative actions and applicable corrective actions; and perform an operational test of the refuel and defuel system; in accordance with paragraphs 2.B. and 2.C. of the Accomplishment Instructions of Bombardier Service Bulletin 700-28-6006, dated June 1, 2020. All related investigative and corrective actions must be done before further flight.

(h) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal

inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer:* For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada Civil Aviation (TCCA); or Bombardier, Inc.'s TCCA Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(i) Related Information

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) TCCA AD CF-2020-37, dated October 9, 2020, for related information. This MCAI may be found in the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0030.

(2) For more information about this AD, contact Siddeeq Bacchus, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7362; fax 516-794-5531; email 9-avs-nyaco-cos@faa.gov.

(j) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Bombardier Service Bulletin 700-28-6006, dated June 1, 2020.

(ii) [Reserved]

(3) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax

514-855-7401; email thd.crj@aero.bombardier.com; Internet

<https://www.bombardier.com>.

(4) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fedreg.legal@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on May 6, 2021.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2021-11427 Filed: 5/28/2021 8:45 am; Publication Date: 6/1/2021]